

Application No.: 10/795,967

**Remarks/Arguments**

The Examiner has rejected the claims under 35 USC §112, second paragraph as being indefinite because it is unclear how much anthocyanin must be present in order to be considered "rich". Applicants respectfully submit that the term "anthocyanin-rich extracts" (AREs) are clearly defined in the specification on page 5 lines 16-25. The definition provides a quantitative as well as a qualitative description of an anthocyanin-rich extract such that one skilled in the art can identify an ARE in accordance with the invention. Withdrawal of this rejection is respectfully requested.

**Claim Rejections under 35 USC §103**

The Examiner has rejected claims 1-22 under 35 U.S.C. 103(a) as being unpatentable over Rosen (U.S. Pat Pub 2003/0031734 A1) in view of Internet website <http://www.aronia.dk/information/anthocyanins.htm> ("website"). Applicants respectfully disagree.

Applicants have amended the claims to recite that the anthocyanin-rich extracts are derived from chokeberries. Rosen does not disclose the use of anthocyanins from chokeberries. Rosen also does not make obvious the methods of Claims 1-22 as Rosen does not disclose or suggest the superior results in the inhibition of cancer cell growth obtained with chokeberry extract as disclosed on page 37 lines 7-12 and page 37 line 24 through page 38 line 5. The Website also does not disclose or suggest the superior results obtained with the chokeberry extracts of the invention in the inhibition of cancer cell growth.

Applicants disagree with the Examiner's statement that the effects on tumor growth and cell cycle growth as recited in claims 1-22 are intrinsic to the blueberry extracts disclosed in Rosen. As disclosed on page 37 lines 3-7, extracts from different berries inhibited the growth of cancer cells to varying degrees, even when the extracts were standardized for equal monomeric anthocyanin content. The amounts and types of the variety of anthocyanins contained in each extracts derived from a variety of berry sources result in differing antioxidative and biological activity between such extracts as discussed on page 5, lines 10-16 of the present application. An example of this is

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exemplified in the present application on page 59, line 4, where it is stated that chokeberry extract appears to be inhibiting cancer cell growth by a mechanism that differs from the mechanism of inhibition of cancer cell growth by bilberry or grape extract. Therefore, the blueberry extract disclosed in Rosen does not possess the same intrinsic properties as the chokeberry extract of the present invention and would not be expected inhibit cancer cell growth in the same manner or to the same degree as the chokeberry extract of the present invention.

Therefore, the cited combination of references does not make obvious the superior inhibitory activity of the chokeberry extract of the present invention. In view of the above, Applicants respectfully request that this rejection be withdrawn.

**Information Disclosure Statement**

An Information Disclosure Statement is being filed concurrently herewith.

**Conclusion**

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned at (978) 251-3509.

Respectfully submitted,

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